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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/561,286

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01/19/2011

EXAMINER

GRANT, ALVIN J

ART UNIT

PAPER NUMBER

3723

MAIL DATE

DELIVERY MODE

01/19/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,286

Applicant(s)

BOHNE ET AL.

Examiner

ALVIN J. GRANT

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3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 1-4, 6, 9, 12-14, 19-21 and 24, 26-30** are rejected under 35

U.S.C. 102(b) as being anticipated by Chang 5,022,157.

Referring to claims 1-4, 6, 13, 19-21, 24, 26 and 27, Chang discloses an eccentric transmission, comprising: an imbalance compensation element **(2)**; an eccentric element **(at 2)**; at least one ball bearing **(31)** which is coupled to the eccentric element **(at 2)** an armature shaft **(11)** having a rotation axis; an oscillating link **(5)**; and a drive shaft **(3)**, wherein a center of mass of a total system comprising the eccentric element **(at 2)** and the at least one ball bearing **(31)** lies on the rotation axis, wherein the eccentric element **(at 2)** has an armature recess **(at 11, Fig. 2)** receiving the armature shaft **(11)**, is rotatably and fixedly mounted on the armature shaft at the armature recess, rotates with the armature shaft **(11)** and converts, due to its own rotation during an operation mode, a revolving rotary motion of the armature shaft **(11)** into an oscillating rotary motion of the drive shaft **(3)** via the oscillating link **(5)** in order to drive an insertion tool **(2:7)** of a hand-held power tool **(5)** to oscillate, wherein the imbalance compensation element **(2)** is a one-piece part of an additional functional unit **(eccentrically driven to drive the rocker arm)** and an axis (which can be any axis) of the outer casing **(22c)** is tilted in relation to at least one axis of the eccentric element; the additional functional unit is the eccentric element **(at 2)**; the imbalance compensation element **(at 2)** includes a recess **(Fig. 2)**; the eccentric element has an

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opening (**Fig. 2 at 11**); the eccentric element and the armature shaft rotate about a same axis; the armature shaft (**11**) and the drive shaft (**3**) are substantially arranged perpendicular to each other (**Fig. 1**); eccentric transmission, comprising: an imbalance compensation element (**2**); a ball bearing (**31**); an eccentric element (**at 2**) coupled to the ball bearing (**31**); the oscillating element is fork shaped and rests on both sides of the bearing (**Fig. 1 at 33**); and the drive shaft is supported in a housing of the hand-held power tool (**1:44-49**) by a ball bearing (**33**).

Referring to claims 9, 12 and 14, the shaft of the armature when secured *within* the protruded portion (**at 21**) becomes a part of the eccentric function.

Regarding (newly added) claims 28-30, the eccentric element (**2**) comprises a cylindrical drive pin (**23**) being arranged in a front region of the eccentric element (**2**); in a mounted state the at least one ball bearing (**31**) is slid onto the cylindrical drive pin (**23**); and an axis of the cylindrical drive pin (**23**) is offset eccentrically and in a parallel fashion to the rotation axis (**at 11**).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 4, 5, 7, 8, 10, 11, 15, 16 and** are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang.

Referring to claims 4, 5 and 7, Chang is described above. Chang does not specifically disclose the imbalance compensation element being composed of an outer casing of the eccentric element and having a tilted axis in at least one axis of the eccentric element; and has a cross section that changes in the axial direction. The configuration of the eccentric element is a matter of engineering expedient and is dependent on the purpose to be served thereby. It would have been an obvious matter of design choice to make the different portions of the eccentric element of whatever form or shape was desired or expedient. A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results. *In re Dailey et al.*, 149 USPQ 47.

Referring to claim 8, Chang discloses a second imbalance compensation element (4) having at least two axially offset regions with different imbalance.

Referring to claims 10, 11, 15 and 16, Chang does not specifically disclose the armature shaft having a recess therein or a flattened portion. The shape of the shaft is dependent on the purpose to be served thereby and is a matter of engineering expedient. It would have been an obvious matter of design choice to make the different portions of the armature shaft of whatever form or shape was desired or expedient. A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results. *In re Dailey et al.*, 149 USPQ 47.

Referring to claim 25, Chang does not specifically disclose armature shaft and the oscillating link being parallel to each other during at least one mode of operation. The

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orientation of the operational elements is a matter of engineering expedient wherein the elements are configured in accordance with the functions to be performed thereby. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Chang's apparatus to have the armature shaft and the oscillating link being parallel to each other during at least one mode of operation as a matter of engineering expedient.

Referring to claims 28-30, Chang does not specifically disclose

Response to Arguments

4. Applicant's arguments filed 11/12/10 have been fully considered but they are not persuasive.

- Applicant's argument that US Patent No. 5,022,157 (to Chang) fails to disclose the limitation *of at least one ball bearing which is coupled to the eccentric element* in claim 1 is not convincing. Chang discloses a ball bearing **(31)** which is *coupled* to the eccentric element **(2)** by lock bolt **(23)**.
- In response to Applicant's argument that Chang hints nowhere any teaching, suggestion, or motivation so that a center of mass of a total system comprising the eccentric element **(2)** and the ball bearing **(31)**, or any ball bearing, lies on the armature shaft **(11)**, this feature is shown in Fig. 1 (see the center line through **(11)**, **(2)** and **(31)**).
- The remainder of Applicant's arguments are based on the preceding arguments being convincing.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALVIN J. GRANT whose telephone number is (571)272-4484. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. J. G./
Examiner, Art Unit 3723

/Joseph J. Hail, III/

Supervisory Patent Examiner, Art Unit 3723